2.5 COMPARING THE ALTERNATIVES – A SUMMARY OF CHAPTER 3

2.5.1 Management Outcomes and Activities

Table 2-8. Summary of Estima	ted Vegetative Treatme	nt Outcomes and Activities by	Alternative fo	r the Chipper	wa NF					
Outcome or Activity	Current Condition	Unit	Time-frame			Δ	Iternative			
Outcome of Activity	Current Condition	Onit	i iiiie-ii aiiie	A No Action	В	С	D	Mod. E	F	G
Suitable Timber Land	479,032 ac.	Acres	NA	471,365	456,399	471,365	0	459,313	444,360	456,933
Total Area Harvested	67,107 acres from 1992-2002	Maximum acres	1 st ten years of implementation	85,340	55,141	117,828	34,752	77,637	47,288	60,652
Clearcutting Proportion	69% of total acres treated from 1992-2002	Percent of total acres treated	1 st ten years of implementation	70%	30%	65%	0%	38%	50%	39%
Timber Volume	average volume from '92-'02 was 65 MMBF	Maximum MMBF	1 st ten years of implementation	70	38	91	21	58	37	46
Site Preparation (mechanical & prescribed fire)	6,710 acres treated from 1993- 2002	Maximum acres that could be treated	1 st ten years of implementation	3,300	2,900	900	0	2,600	5,400	2,700
Prescribed Fire for Ecosystem Disturbance in the 1 st ten years	0 acres treated from 1993-2002	Maximum number of acres of red and white pine over 40 yrs old and not scheduled for harvest that could be treated	1 st ten years of implementation	6,900	7,800	7,200	9,000	7,900	7,500	6,800
Prescribed Fire for Hazardous Fuel Reduction	27,992 acres from 1993-2002	Max acres that could be treated	1 st ten years of implementation	25,600	28,200	22,700	30,100	26,200	28,900	27,700
Present Net Value*		Millions of w/market values	100 yrs at 4%	-\$420	-\$524	-\$438	-\$600	-\$479	-\$520	-\$500
(full implementation)		Millions of w/market and non-market dollars values	100 yrs at 4%	\$9,798	\$9,675	\$9,842	\$9,601	\$9,771	\$9,667	\$9,695

Table 2-9. Summary of Estimated Vegetative Treatment Outcomes and Activities by Alternative for the Superior NF

Outcome or Activity	Current Condition		Units	Time-frame			Δ	Iternative			
Outcome or Activity	Current Condition		Offics	riine-iraine	A No Action	В	С	D	Mod. E	F	G
Suitable Timber Land acres	645,035 ac.		Acres	NA	981,908	884,727	991,954	0	944,909	959,428	944,024
Total Area Harvested	78,058 acres from 1992-2002		Maximum acres	1 st ten years of implementation	156,202	88,292	221,191	76,099	130,967	107,365	116,763
Clearcutting Proportion	98% of total acres treated from 1992-2002	Percer	nt of total acres treated	1 st ten years of implementation	73%	42%	74%	0%	63%	61%	52%
Timber Volume	average volume from '92-'02 was 75 MMBF	Γ	Maximum MMBF	1 st ten years of implementation	100	51	150	37	102	70	70
Site Preparation (mechanical & prescribed fire)	7,828 acres treated from 1993- 2002	Maximum	acres that could be treated	1 st ten years of implementation	6,200	6,200	1,700	0	6,700	15,100	7,000
Prescribed Fire for Ecosystem Disturbance	7,715 acres treated from 1993- 2002 as Wildland Fire Use fires within the BWCAW	white pin scheduled	number of acres of red and e over 40 yrs old and not d for harvest that could be d outside the BWCAW	1 st ten years of implementation	7,600	8,000	7,200	9,200	6,200	6,800	7,100
Prescribed Fire for Hazardous Fuel Reduction	26,437 acres from 1993-2002	Maximum	acres that could be treated	1 st ten years of implementation	62,000	68,200	56,300	69,300	66,100	66,400	65,700
Present Net Value*	Present Net Value*		w/market values	100 yrs at 4%	-\$1,131	-\$1,258	-\$1,153	-\$1,362	-\$1,210	-\$1,245	-\$1,225
(full implementation)		Millions of dollars	w/market and non-market values	100 yrs at 4%	\$10,199	\$10,143	\$10,209	\$10,045	\$10,183	\$10,065	\$10,126

^{*} Present net value is calculated by subtracting discounted costs from discounted benefits (or revenues). It is a measure of how efficiently the Forest Service is using tax dollars to obtain the goals of each alternative. Market values are products and services that the Forests Service provides that have an established price, such as timber, campground fees, and special use fees. Non-market values are estimated "prices" for items that do not have an established price, such as recreation visitor days for snowmobiling, hiking, or hunting.

2.5.2 Summary Comparison of Alternatives

Table 2-10. Comparison of Effects and Outcomes - CHIPPEWA NF

Issue	Units	Current Condition					Alternatives										
	Onits	Current Condition	A – No	Action	В		(D	Modi	fied E		F	G		
Vegetation	decade		Dec. 2	Dec. 10	Dec. 2	Dog 10	Dec. 2	Dec. 10	Dec. 2	Dec. 10	Dec. 2	Dec. 10	Dog 2	Dec. 10	Dog 2	Dog 10	
	% conifer	27%	28%	31%	34%	Dec. 10 57%	39%	36%	35%	58%	34%	42%	Dec. 2 34%	52%	Dec. 2 34%	Dec. 10 51%	
Vegetation Condition at the end of Decades		73%	72%	69%	66%	43%	61%	64%	65%	42%	66%	58%	66%	48%	66%	49%	
2 & 10		11%	13%	16%	4%	4%	14%	15%	4%	2%	8%	7%	5%	6%	7%	7%	
	upland % 0-10 yrs. upland % 100+yrs.	7%	11%	18%	14%	51%	9%	22%	14%	53%	14%	35%	14%	50%	13%	38%	
Wildlife	apiana 70 1001 yrs.	1 70	1170	1070	1470	3170	370	ZZ /0	1470	3370	1470	3370	1 7 70	3070	1370	3070	
Emphasized Habitat	management direction in Forest Plans	Provides habitat mostly for species associated with young, early successional forests and edges.	mostly for association young succession	associated with young, early		Landscape is dominated by habitat for species associated with older forest, later successional forest, and interior areas.		bitat mostly associated orests, early forests, and les.			species ass a variety conditi	habitat for sociated with of forest ons and anal stages.	natural distur Older fores ecosystems habitat ass	racteristic of bance regime. ts, but some dominated by ociated with sional species.	conditions and successional stages.		
Older Forest	how older forest is provided for in the alternatives	MA Objectives for old/extended rotation forest	MA Objectives for old/extended rotation forest		pRNAs, wilderness study		Landscape ecosystem vegetation and habitat objectives; Some extended rotation; Standards and guidelines		Landscape ecosystem vegetation and habitat objectives; Non-suitable land MA allocations: Minimum Management Natural Areas, all pRNAs, all wilderness study areas; Standards and guidelines		Landscape ecosystem vegetation and habitat objectives: Standards and guidelines		Landscape ecosystem vegetation and habitat objectives: MA allocation: all pRNAs; Standards and guidelines		Landscape ecosyst vegetation and hab objectives: MA alloca upper level SMCs a some wilderness stareas; Standards a guidelines		
Fragmentation of Forest Habitats	management direction in Forest Plans	Objectives, standards, and guidelines increase fragmentation in young and old forest, 40 acre opening size limit	fragmentation in young and old forest, 40 acre opening size				fragmentation primarily in				Objectives, standards and guides reduce fragmentation young forest, mitigate fragmentation in older forest; 1000 acres opening size limit		Objectives, standards and guides reduce fragmentation in young and		Objectives, and guide fragmentatio and old for acres openir	s reduce on in young rest; 1000	
Old-growth Forest	acres of management areas that are managed to promote or contribute to old- growth	27,941	limit 27,941		248,5	586	41,(002	649),821),691	84,	591	169,	685	
Timber																	
	ratio of sawtimber to pulpwood for decade 1		29	9:71	34:6	<u></u> 66	26:	74	16	5:84	32	2:68	29	:71	35:0	65	
Relative Fire Risk																	
	fire risk index at the end of decade	Moderate	L	.ow	Hig	h	Lo)W	Hi	igh	Mod	lerate	Mod	erate	Mode	erate	

Issue	Units	Current Condition					1	т		ternatives						
	Jiill J		A – No	Action		В	(D	Modif	ied E		F	G	
Watershed/Riparian	decade		Dog 2	Dog 10	Dog 2	Dog 10	Dog 2	Doc. 10	Dog 2	Dog 10	Dog 2	Dog 10	Dog 2	Dog 10	Dog 2	Dog 10
	% old growth age class		Dec. 2	Dec. 10	Dec. 2	Dec. 10	Dec. 2	Dec. 10	Dec. 2	Dec. 10	Dec. 2	Dec. 10	Dec. 2	Dec. 10	Dec. 2	Dec. 10
Riparian Area Vegetation Condition at end of Decades 2 &	in forested portion of combined inner and outer RMZs	16%	23%	49%	33%	75%	22%	51%	32%	74%	29%	71%	32%	68%	32%	71%
10 RMZ = riparian	% long lived species in forested portion of inner RMZs	50%	59%	72%	66%	100%	58%	70%	66%	100%	68%	99%	63%	90%	66%	100%
management zone	% long lived species in forested portion of outer RMZs	49%	55%	64%	61%	88%	56%	66%	59%	86%	57%	73%	61%	84%	57%	75%
Riparian Management	management approach	Mitigative Approach	Mitigative Approach		Proactive Approach & Riparian MA		Mitigative Approach		Proactive Approach		Proactive Approach & Riparian MA		Mitigative Approach & Riparian MA		Proactive Ap Riparia	
Potential Impacts to Watersheds of New System and Temp. Roads	% of 6 th level watersheds that increase in riparian road interaction class at end of decade 2	NA	14	%	9	9%	14	%	8	%	11	%	10%		11%	
Recreation																
Recreation	Semi-primitive Non-motorized	2%	29	%	29	9%	29	%	58	8%	49	%		3%	59	%
Opportunity Spectrum Class Objectives	Semi-primitive Motorized	0%	09		1%		0%		34%		2%		1%		16%	
(% of total NFS acres)	Roaded Natural	95%	95			8%	95%		5%		91%		94%		76%	
	Rural maximum miles of	3%	30	%	3	3%	30	%	3	3%	39	%		3%	30	%
All Terrain Vehicle (ATV) Trails	additional designated trails	20 existing miles	6	0	3	30	60		0		90	0		60	6	0
RMV use of NFS	NFS existing [‡] low standard system roads*	Allowed	Allo	wed	Allo	wed	Allo	wed	Allo	owed	Allov	wed	Al	lowed	Allo	wed
Roads [†]	NFS unclassified roads*	Allowed	Allo	wed	Proh	ibited	Prohi	bited	Proh	ibited	Prohi	bited	Pro	hibited	Prohi	bited
Cross-country Travel Policy	OHV use*	Prohibited	Prohi	bited	Proh	ibited	ATV big gam trapping a	ne retrieval & ccess only	Proh	ibited	Prohi	bited	Pro	hibited	Prohi	bited
Policy	snowmobile use	Prohibited	Prohi	bited	Proh	ibited	Prohi	bited	Proh	iibited	Prohi	bited	Pro	hibited	Prohi	bited
Snowmobile Trails	maximum miles of additional designated trails	378 existing miles	10	00	4	40	10	00		0	100		70		70	
Water Access	facility development level for new access sites	High	Hi	gh	L	ow	Hi	High		No new		High		Moderate		erate

[†]Snowmobiles only allowed on unplowed roads.

* 'Allowed' uses may have limits in some management areas. Exceptions are noted in the RMV section of Chapter 3 of the EIS

‡ RMV use would generally be prohibited on newly constructed low standard roads.

Table 2-10. Compa	arison of Effects and	Outcomes - CHIPPI	EWA NF - Continue	d					
Issue	Units	Current Condition				Alternatives			
Issue	Ollits	Current Condition	A – No Action	В	С	D	Modified E	F	G
Special Designations									
Wilderness Study	number of areas NFS	0 areas	0 areas	2 areas	0 areas	2 areas	0 areas	0 areas	1 area
Areas	acres	U aleas	0	6,213	0	6,213	0	0 aleas	2,727
Special Management Complexes	NFS acres	0 areas	0	169,098	0	0	0	0	85,595
Potential Research Natural Areas	number of areas NFS acres	4 existing RNAs 2,140	1 area 769	9 areas 6,316	1 area 769	8 areas 5,617	3 areas 1,699	10 areas 9,530	9 areas 8,831
Economic									
Jobs	total jobs in the year 2012 in the economic impact area	14,479	19,047	15,858	18,446	12,332	17,097	15,350	17,859
Labor Income	total labor income in the year 2012 (\$ million) in the economic impact area	\$348.2	\$479.6	\$374.6	\$462.8	\$262.2	\$415.8	\$358.5	\$438.1
Roads									
Total Maintenance Level 1 Roads	miles at the end of decade 1	324	155	152	156	140	155	151	154
Temporary Roads	miles in decade 1	355 miles built between '92 – '02	473	262	653	183	324	237	304

Issue	Units	Current			Alternatives											
	Onits	Condition	,	4	В		(С)	Modi	fied E			(G
Vegetation	decade		Dec. 2	Dec. 10	Dec. 2	Dec. 10	Dec. 2	Dec. 10	Dec. 2	Dec. 10	Dec. 2	Dec. 10	Dec. 2	Dec. 10	Dec. 2	Dec. 10
Vegetation Condition	% conifer	40%	42%	52%	45%	80%	42%	53%	50%	81%	46%	60%	46%	72%	47%	67%
in Decades 2 & 10	% deciduous	60%	58%	48%	55%	20%	58%	47%	50%	19%	54%	40%	54%	28%	53%	33%
(does not include BWCA)	upland % 0-10 yrs.	14%	13%	15%	5%	6%	15%	14%	5%	2%	11%	10%	8%	9%	9%	10%
BHOA	upland % 100+ yrs.	9%	8%			50%	13%	22%	18%	51%	17%	32%	18%	38%	16%	33%
Timber				070 1070												
	ratio of sawtimber to pulpwood for decade		19:81		24:76		18:82		16:84		21:79		24	:76	23	:77
Wildlife	·															
Emphasized Habitat	management direction in Forest Plans	Provides habitat mostly for species associated with young, early successional forests and edges.			Landscape is dominated by habitat for species associated with older forest, later successional forest, and interior areas.		for species with your early suc	for species associated with young forests, early successional succession		nabitat for ociated with est, later all forest and areas.	a variety of fores		Habitat characteristic of natural disturbance regime Older forests, but some ecosystems dominated by habitat associated with early successional species		successio Habitat :	
Older Forest	how older forest is provided for in the alternatives	Wildlife standards and guidelines			Landscape ecosystem vegetation and habitat objectives; MA allocations: all SMCs, all pRNAs, wilderness study areas; Standards and guidelines				Landscape ecosystem vegetation and habitat objectives; Non-suitable land MA allocations: Minimum Management Natural Areas, all pRNAs, all wilderness study areas; Standards and guidelines		vegetation and habitat objectives: Standards and guidelines		vegetation objectives: N all pRNAs; S	ecosystem and habitat IA allocation: tandards and elines	vegetation objectives: N upper leve some wilde areas; Sta	e ecosystem and habitat MA allocation: I SMCs and erness study ndards and elines
Fragmentation of Forest Habitats	management direction in Forest Plans	fragmentation in young and old forest, 40 acre or	fragmentation in young and old forest, 40 acre or 200 acre opening size limit depending on		and guide fragmentation young forest;	s reduce n in old and 1000 acres	and guid fragmentat in young f	s, standards es reduce ion primarily orest; 1000 ing size limit	Objectives, standards and guides reduce fragmentation primarily in older forest; 1000 acres		and guid fragmenta forest, fragmental forest; 10	s, standards es reduce ation young mitigate tion in older 000 acres size limit	guides fragmentation old forest;	tandards and reduce in young and 1000 acres size limit	fragmentation old forest;	reduce
Old-growth Forest	acres of management areas that would contribute to old- growth	1,000,003 (BWCAW = 810,609)	1,000	1,000,003		1,589,419		0,302	2,208	3,421	1,119,449		1,045,071		1,178,929	
Relative Fire Risk			ow	Hig	h	L	ow	Hi	gh	Mod	erate	Mod	erate	Mod	erate	

Alternatives Chapter 2

Table 2-11. Comparison of Effects and Outcomes – SUPERIOR NF - continued

Issue	Units	Current							Alte	natives						
	Offics	Condition	Α		В		С		D		Modi	fied E		F	G	
Watershed/Riparian	decade		Dec. 2	Dec. 10	Dec. 2	Dec. 10	Dec. 2	Dec. 10	Dec. 2	Dec. 10	Dec. 2	Dec. 10	Dec. 2	Dec. 10	Dec. 2	Dec. 10
Riparian Area Vegetation Condition at end of Decades 2 &	% old growth age class in forested portion of combined inner and outer	36%	41%	49%	50%	69%	36%	48%	48%	70%	54%	74%	46%	59%	49%	67%
RMZ = riparian	% long lived species in forested portion of inner RMZs	48%	56%	80%	58%	96%	56%	74%	58%	96%	58%	96%	57%	88%	58%	96%
management zone	% long lived species in forested portion of outer RMZs	46%	52%	68%	53%	85%	51%	64%	53%	81%	53%	74%	53%	75%	53%	75%
Riparian Management	management approach	Mitigative Approach	Mitigative A	pproach	Proactive A	Approach	Mitigative A	pproach	Proactive A	Approach		Approach & an MA	Mitigativ	e Approach	Proactive A	Approach
Potential Impacts to Watersheds of New Summer System and Temporary Roads	% of 6 th level watersheds that increase in riparian road interaction class at end of decade 2	NA	17%		11%		22%		7%		12%		10%		15%	
Recreation																
	Primitive	5 %	5 %		5 %	6	5 %)	5 %	6	5	%		5 %	5 9	%
Recreation Opportunity Spectrum	Semi-primitive Non-motorized	29%	29%	, D	609	%	29%	, o	659	%	3	1%	3	31%	30	%
Class Objectives (%	Semi-primitive Motorized	5%	5%		4%	, 0	5%		289	%	7	%		8%	15	%
total acres)	Roaded Natural	60%	60%		309		60%		1%			6%		55%	49	
	Rural	1%	1%		1%	6	1%		1%	0	1	%		1%	19	6
All Terrain Vehicle (ATV) Trails	maximum miles of additional designated trails	40 existing miles	60		30)	60		0		9	90		60	60)
RMV use of NFS Roads [†]	NFS existing [‡] low standard system roads*	Allowed	Allow		Allow		Allow		Allow			wed		owed	Allov	
Noaus	NFS unclassified roads*	Allowed	Allow	ed	Allow	ved	Allow		Prohib	oited	Allo	wed	All	owed	Allov	ved
Cross-country Travel Policy	OHV use*	ATV allowed	ATV Allo		Prohib		ATV big game & trapping ac	cess only	Prohib			ibited		hibited	Prohil	
1 Only	snowmobile use*	Allowed	Allow	ed	Allow	ved	Allow	ed	Prohik	oited	Allo	wed	All	owed	Allov	ved
Snowmobile Trails	maximum miles of additional designated trails	705 existing miles	90		50)	90		0		130		90		90	
Water Access	facility development level of new access sites	High	High	ı	Lov	W	High	1	Lov	N	Н	igh	Мо	derate	Mode	erate

[†]Snowmobiles only allowed on unplowed roads.

^{* &#}x27;Allowed' uses may have limits in some management areas. Exceptions are noted in the RMV section of Chapter 3 of the EIS ‡ RMV use would generally be prohibited on newly constructed low standard roads.

looue	Unito	Current				Alternatives			
Issue	Units	Condition	Α	В	С	D	Modified E	F	G
Special Designations									
		BWCAW					"		
Wilderness Study	number of new areas NFS	designated	0 areas	12 areas	0 areas	30 areas	0 areas	0 areas	4 areas
Areas	acres	wilderness	0	17,485	0	60,163	0	0	3,672
		810,609							
Special Management	NFS Acres	0 areas existing	0	345,751	0	0	0	0	183,302
Complexes	(0 acres existing)	o areas existing	U	345,751	U	U	U	0	103,302
Potential Research	number of areas	4 existing	1 oron	41 areas	1 0500	41 areas	11 areas	41 areas	26 areas
	NFS acres	RNAs	1 area		1 area				
Natural Areas	(1 existing RNA)	3,184	792	45,571	792	45,571	19,448	45,571	34,537
Economic									
	total jobs in the year 2012							. "	

28,241

\$681.7

1,292

1,236

23,581

\$525.1

1,024

425

27,140

\$642.5

1,132

754

27,111

\$638.7

1,082

600

26,763

\$627.8

1,099

653

25,288

\$578.9

1,046

494

in the economic impact

area
total labor income in the
year 2012 (\$ million) in the
economic impact area

miles at the end of decade

(883 existing)

miles in decade 1

24,720

\$561.0

883 existing

miles

432 miles built

from '92-'01

27,428

\$652.0

1,172

873

Jobs

Labor Income

Roads

Total Maintenance

Level 1 Roads

Temporary Roads

blank page